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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/809,295	03/16/2001	Junichiro Yoshioka	2001-0322A	5431

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WENDEROTH, LIND & PONACK, L.L.P.
2033 K STREET N. W.
SUITE 800
WASHINGTON, DC 20006-1021

EXAMINER

MUTSCHLER, BRIAN L

ART UNIT	PAPER NUMBER
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1753

8

DATE MAILED: 04/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/809,295

Applicant(s)

YOSHIOKA ET AL.

Examiner

Brian L. Mutschler

Art Unit

1753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-81 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-81 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-4, drawn to a plating apparatus having a deaerating unit and a diaphragm, classified in class 204, subclass 252.
 - II. Claim 5, drawn to a method for plating while maintaining an oxygen concentration, classified in class 205, subclass 82.
 - III. Claims 6-20, drawn to a plating apparatus, classified in class 204, subclass 198.
 - IV. Claims 21-56, 67-69 and 72-78, drawn to a plating apparatus having a plating liquid regulation unit, classified in class 204, subclass 400.
 - V. Claims 57-66 and 79, drawn to a plating apparatus for plating two different metals, classified in class 204, subclass 267.
 - VI. Claims 70 and 80, drawn to a method for plating involving a pre-wetting step, classified in class 205, subclass 205.
 - VII. Claims 71 and 81, drawn to a method for plating involving a pre-soaking step, classified in class 205, subclass 210.

The inventions are distinct, each from the other because of the following reasons:

The claims of Group I use a diaphragm, which is not recited in the other groups, except for Group II. Group I and Group II are distinct from one another because the

apparatus of Group I can be used for another method, such as a plating method without measuring the oxygen concentration.

The claims of Group II are distinct because they recite the step of maintaining the oxygen concentration, which is not recited in the other groups.

The claims of Group III are distinct from the other groups because they recite both a substrate transfer device and a substrate holder transfer device, which is not recited in any other claim, and they do not require the use of a deaerating unit, which is recited in the other groups.

The claims of Group IV are distinct from the other groups because they require the use of plating liquid regulating unit.

Group V is distinct from the claims of the other groups because it recites a plurality of plating tanks for plating two different metals.

Group VI is distinct from the claims of the other groups because it recites a method for plating comprising the step of drying the substrate after the substrate is removed from the substrate holder. As seen in claim 39, which recites that the substrate is dried while in the substrate holder, the apparatus of Group IV can be used to perform a different method, wherein the substrate is held by the substrate holder while drying. Additionally, the method recited in the claims of Group VI does not recite a deaerating step or a method of maintaining a certain gas concentration.

Group VII is distinct from the claims of the other groups because it recites a method for plating comprising the step of drying the substrate after the substrate is removed from the substrate holder. As seen in claim 50, which recites that the

substrate is dried while in the substrate holder, the apparatus of Group IV can be used to perform a different method, wherein the substrate is held by the substrate holder while drying. Additionally, the method recited in the claims of Group VII does not recite a deaerating step or a method of maintaining a certain gas concentration.

2. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

3. This application contains claims directed to the following patentably distinct species of the claimed invention involving the claims of Group IV, claims 21-56, 67-69 and 72-78:

Species I. Claims 35-45, 73 and 77, drawn to an apparatus having a pre-wetting unit.

Species II. Claims 46-56, 74 and 78, drawn to an apparatus having a pre-soaking unit.

Species III. Claims 67-69 and 75, drawn to an apparatus having an annealing unit.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 21-34, 72 and 76 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

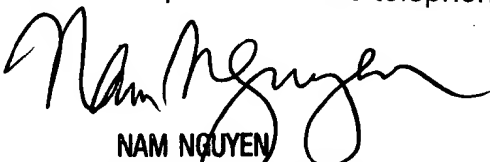
4. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian L. Mutschler whose telephone number is (703) 305-0180. The examiner can normally be reached on Monday-Friday from 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (703) 308-3322. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.


NAM NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

blm
April 14, 2003